

The incisors of the lower jaw are thick and round. The skull, in comparison with the skull of *Capra caucasica*, has neither such a developed forehead nor such a broad occipital region.

The fur has the following peculiarities: the general colour is a brownish grey, with more expressed yellowish tinge than in *Capra caucasica*; the head is darker, a light spot on the nape of the neck is but a little developed; along the ridge of the spine a dark stripe. The anterior and posterior extremities are dark with a very observable light stripe on their posterior side. The fur on the belly is light brownish. The beard, brown in colour, is longer and narrower than in *Capra caucasica*; the tail, on the contrary, is shorter.

It seems to me that all the figures of horns on the plate accompanying Mr. Büchner's pamphlet (taf. 1) should be referred to *Capra severtzowi*.

The distribution of Severtzow's Goat is more extensive than that of *Capra caucasica*; this animal is met with throughout the whole of the alpine region of the western Caucasus, and, according to the observations of Mr. Dinnik, presents some marked distinctions in the specimens inhabiting its westernmost parts. "Their horns are comparatively short, thick, with a more decided outward turn at the base, and with large nodules on the anterior side. Their section taken near the base proved them to be quadrangular with rounded corners, rather than triangular. The circumference at the base of the horn as compared with the length measured along the anterior surface is equal to half or a little more. The colour of the fur of this Goat is also perceptibly lighter."

It is possible that this western Caucasian Mountain-Goat may form a third distinct species, or at least a variety of *Capra severtzowi*.

Both the described typical specimens of Goats (*Capra caucasica* and *Capra severtzowi*) are now preserved in the Zoological Museum of the University of Moscow.

7. Critical Notes on the Nomenclature of Indian Mammals.

By W. T. BLANFORD, F.R.S., F.Z.S.

[Received November 9, 1887.]

I. *On the Simia silenus and S. veter of Linnæus, and on the proper name of the Malabar Bearded Monkey.*

Ever since the time of Schreber the specific name *silenus* has been applied to a bearded species of *Macacus* peculiar to the Malabar coast. This Monkey is commonly known amongst European zoologists as the Wanderoo, and in many European works on natural history is said to inhabit Ceylon; but it was long since shown by various writers that the species is not Ceylonese, and that the Wanderoo of Ceylon is a *Semnopithecus*. The question I have endeavoured to solve is whether the bearded *Macacus* of Malabar is the *Simia silenus* of Linnæus.

In the twelfth edition of the 'Systema Naturæ,' vol. i. p. 36, *Simia silenus* is described thus:—"S. caudata barbata nigra, barba nigra proluxa. Habitat in Egypto. Species obscurior, ignotis. Pedum unguibus, aliisque plurimis attributis." Neither the colour of the beard nor the locality agrees with the Malabar Monkey.

Two references are given by Linnæus thus:—

"*Simia Callitriches magnitudinæ Cynocephalorum.* Alp. ægypt. 242?"

"*Cercopithecus barbatus niger, cæsariæ proluxa faciem cingente.* Briss. Quad. 209."

Brisson's account was, however, taken from Prosper Alpinus's work, to which the first reference in Linnæus applied. It is thus manifest that the *S. silenus* of Linnæus is founded solely on P. Alpinus's description. His work is entitled "Prosp. Alpini Hist. Ægypti naturalis pars prima. Lugduni Batavorum, MDCCLXXXV." At p. 242 are several descriptions of Monkeys, but bearded species are only described towards the bottom of the page. The work is rare (the only copy I have seen is in the British Museum), so I append a somewhat lengthy extract.

"*** Tertius est ex iis qui vulgo Monichi vocantur caudati, & barbati: ex Ethiopiæ locis conterminis in Ægyptum deducuntur, suntque admodum cicures, & mundi, non tamen eo ingenii acumine, ut alii Cynocephali donati sunt. At ut feles naturam ingenii habent, atque hæc de Simiis Cynocephalis à facie canina vocatis sufficient. Sequuntur has Simiæ caudatæ & barbatae, quas Callitriches Aristoteles vocavit, quæ prioribus admodum dissimiles cernuntur. Quædam maximorum Canum magnitudinem habent, & quædam mediocris sunt magnitudinis. Rarò hæc Simiæ bipedes incedunt, sed quadrupes brutorum modo. Habent alias differentias quibus interstinguuntur; etenim aliquæ ex iis toto corpore figura ad leones accedentes, crinitasque jubar veluti leones habere videntur, sed pilis nigris pendulas. ¶ Hic simius in pectore crassior apparet, & circa ilia subtilior, ut leones. Caudam latam pilis longis, proluxisque cubitalem, & ampliorem habet: facies vero ad leoninam quadantenus inclinatur, ore & dentibus itidem proximis. Barba ex mento pendet longa, lata, nigris pilis obsita. Aures humanis longiores cernuntur, totaque facies nigerrimo splendet colore. Hic Simius haud injuria a nobis Callitriches leonino corpore dictus est."

*** Vide
tab. xx. num.
3.

¶ Vide
tab. xx. num.
2.

With regard to the figures, tab. xx. fig. 3 represents an animal with a thin beard, below the chin alone, and with a rather long tail; tab. xx. fig. 2 shows a Monkey drawn so as to resemble a Lion as much as possible. Neither figure has any resemblance to the Malabar Monkey.

It should, however, be observed that a note of interrogation occurs after the number of the page in Linnæus's reference, and I have no doubt that the animal to which it was intended to refer was one described by Prosper Alpinus on p. 244 in the following terms:—

"Quædam Simiæ ex Callitrichis visuntur magnitudinæ magnorum
PROC. ZOOL. SOC.—1887, No. XLI. 41

Cynocephalorum nigro colore, totius corporis, & faciei præsertim, quæ undequaque est cæsarie magna pilorum nigrorum circumdata. Hilari & eleganti faciei sunt, admodumque. cicures, mansuetæ, benevolæ, atque fideles hæ Simiæ observantur. † Imaginem pictam quam hic damus, misit ad me Nicolaus Contrarenus Patritius Venetus maxime illustris, ad Simiam ex Ægypto Venetias deductam affabre pictura delinatam.”

† Vide tab. xxi.

Tab. xxi. represents an animal with a short tail, hairy body, and long hair all round the head. This figure has some resemblance to the Malabar Monkey, but quite as much to *Cynocephalus hamadryas* or *Macacus (Theropithecus) gelada* or *M. obscurus*. Indeed, taking the description into consideration, the last may not improbably have been the species intended. The resemblance of this figure to that of Buffon's "Ouanderou" not improbably led to the two being confounded.

It will be noticed that the quotation from Prosper Alpinus in Linnæus, "*Simia Callitriches magnitudine Cynocephalorum,*" was evidently taken from the last quoted description.

I conclude therefore that the *Simia silenus* of Linnæus was distinguished by three characters, not one of which can possibly apply to the Malabar Monkey. These three characters were: (1) the size was equal to that of the largest Baboons; (2) the beard was black; and (3) the animal was an inhabitant of Egypt or Ethiopia.

It should, however, be noticed that in the tenth edition of Linnæus, p. 26, *Simia silenus* was described as "*S. caudata barbata, corpore nigro, barba nivea prolixa.*" The only reference is again to Prosper Alpinus, but the locality is given as Asia; Ceylon, Java, &c. It is highly improbable that the Malabar Bearded Ape was the animal indicated¹.

So far as I can ascertain, there is nothing to show that the Malabar animal was known to Linnæus or to any earlier naturalist. But even if the *S. silenus* of the 10th edition of the 'Systema' were founded wholly or partly on the Malabar Monkey, I fail to see how the name could be used for that animal, since the same specific term is applied to a totally different species in the 12th edition.

A second Linnæan name that has been applied to the Malabar Monkey is *Simia veter*, Syst. Nat. ed. xii. p. 36. This was thus described:—"S. caudata barbata alba, barba nigra, Brisson, Quad. 207. *Simia alba s. incanis pilis, barba nigra promissa*, Raj. Quad. 89. Habitat in Zeylona." Brisson's account (like Klein's, which is quoted by Brisson) is taken from Ray, but the page in Ray's 'Synopsis Animalium Quadrupedum' is 158, not 89 (the latter is the page in Klein's work, which Linnæus does not quote). Ray's description runs thus:—"Simia alba seu incanis pilis, barba nigra promissa. Ex Zeylona: Elawandum Zeylanensibus. D. Robinson e Museo Leydensi." It is impossible to determine this animal. It may perhaps have been a *Semnopithecus*; but no Ceylon species

¹ It is very possible that the animal which Linnæus intended to name was the Wanderu of Ray, Synopsis Animal. Quad. p. 158. "*Cercopithecus niger barba incana promissa.*" This was doubtless *Semnopithecus cephalopterus*.

is known to have a black beard. Elawandum is perhaps the same as Eli Wanderu, a Ceylonese name, according to Kelaart, of *S. thersites*, which I believe to be a variety of *S. cephalopterus*. It, however, has not a black beard. Elawandum is the same as Buffon's Lowando. The name *Simia veter* cannot possibly refer to the Malabar Monkey.

I now turn to the authentic history of the Malabar Monkey in the works of European naturalists.

Buffon, Hist. Nat. xiv. pp. 169, 174, pl. xviii., described and figured a Monkey which was clearly the Malabar form. He called the animal "Ouanderon;" and identified it with the "Wanderow" of Captain Robert Knox, and with the Wanderu and Elawandum of Ray. The name of *Wanderu* has clung to the Malabar Monkey ever since; but really applies, as Templeton, Kelaart, Tennent, and others have shown, to the Ceylonese *Semnopithecus*, and was rightly employed for those animals by Knox and Ray. The word *Wanderu*, however, as Sterndale has pointed out, is merely a Cingalese form of the Hindi word *bandar*, and means Monkey in a wide sense.

Schreber, in 1775 (Säugth. i. p. 87), united the "Ouanderou" of Buffon with the *Simia silenus* of Linnæus, and has been followed by naturalists generally¹.

There can be very little doubt but that the animal under consideration is the "Lion-tailed Monkey" of Pennant². The first Latin name that I can find applied to this species is *Simia ferox*, given by Shaw in the 'Museum Leverianum' (p. 69), published in 1792. The description is accompanied by a fair figure. I think that the specific name *ferox* ought, by the rules, to be employed for this species, and I see no reason why Pennant's English name should not be adopted, instead of the misleading term "Wanderoo Monkey."

II. On the *Simia cynomolgus* of Linnæus.

In the twelfth edition of Linnæus's 'Systema Naturæ,' p. 38, a species of *Simia* is thus described:—

"*S. cynomolgus caudata imberbis, naribus bifidis elatis, cauda arcuata, natibus calvis. Habitat in Africa, vigiliis noctu instituit in arboribus.*"

Two references are given:—Brisson, Quad. p. 213, and *Cercopithecus angolensis major*, Marcgrav. Bras. 227. To the quotation from Marcgrav is added a reference to Ray, Quad. 155. Both Ray and Brisson, however, merely copied Marcgrav's account with a few unimportant emendations. It is clear, therefore, that the *Simia cynomolgus* of Linnæus is the animal described by Marcgrav.

George Marcgrav, who appears to have been a trustworthy writer,

¹ The only important exception is Frédéric Cuvier, who, in the folio 'Histoire Naturelle des Mammifères,' gave two capital figures of the "Ouanderou," and pointed out that it differed from the animal described by Prosper Alpinus. In the 'Table Générale et Méthodique,' however, the specific name *silenus* was used.

² Syn. Mamm. p. 109; Hist. Quad. ed. 3, i. p. 198, pl. xlv. f. 1.

published in 1648 a work entitled 'Historia Naturalis Brasiliæ.' This work contains descriptions not only of Brazilian animals, but also of several from the Portuguese possessions in Western Africa. Thus there is an unmistakable figure of the Red River-hog, on which the *Sus porcus* of Linnæus was founded¹. At the page 227 quoted in the 'Systema Naturæ' is the following description:—

"Cercopithecus Angolensis major; in Congo vocant Macaquo. Color pilorum totius corporis ut Lupi, nares habet bifidas, elatas; caput ursino simile, nates calvos quibus insidet: caudam semper portet arcuatam. Longitudo corporis a capite ad caudam unius pedis et supra: capitis longitudo sex digitorum; caudæ pedalis; crura quatuor æqualis longitudinis decem digitorum in prioribus cruribus; manus tres & semis digit. longas, quinque digitis præditas, in posterioribus longas manus quinque digitos. Crassities corporis ubi maxima unius pedis & novem digitorum: clamat hab, hab. Dentes habet albissimos. Mire gesticulatur, penem habet humano similem instar pueri."

It is perfectly clear from this that *Simia cynomolgos*, L., was an animal inhabiting the country around the mouth of the Congo, and, judging from the size, the bear-like head, and tail shorter than the body, a Baboon². Certainly the Linnæan name has not the slightest application to the Malay Monkey, commonly known (improperly) as the Macaque Monkey, for which this name is generally used.

The Malay Monkey is, however, Buffon's "Macaque"; this name and also the generic term *Macaca* of Lacépède (1801) (subsequently modified into *Macacus* by F. Cuvier and Desmarest) being derived evidently from the same West-African or Portuguese word as Maregrav's Macaquo. Schreber in this case, as in that of *Simia silenus*, is the author of the confusion that has arisen. He applied the Linnæan term *Simia cynomolgos* to Buffon's *Macaque*, of which he copied the figure.

The first author, so far as I can ascertain, who noticed the difference between Buffon's Macaque and the *Simia cynomolgos* of Linnæus was Frederick Cuvier, who, in 1818³, proposed for the former the name *Macacus irus*, a name that I think should, in accordance with the rules of nomenclature, be retained for the Malay Monkey.

There are, however, two other early names, *S. aygula*, Linn. (Syst. Nat. ed. 12, i. p. 39), and *S. atys*, Audebert (Hist. Nat. Singes et Makis), that have been applied to the present species; and it is as well to inquire whether either can be identified as pertaining to it. *Simia aygula* was thus described by Linnæus:—"S. caudata subimberbis grisea, eminentia pilosa verticis reversa longitudinali," with the quotation "Osbeck. I. 99." Osbeck's 'Voyage to China

¹ The much later specific title *penicillatus*, given by Schinz in 1847, is commonly used for this animal.

² The term *naribus bifidis* is puzzling, and I cannot suggest any satisfactory explanation of it.

³ 'Mémoires du Muséum,' iv. p. 120.

and the East Indies' was published in 1757 at Stockholm; but there are German and English translations. It appears to me extremely doubtful whether the tufted animal described by Osbeck was not a young *Semnopithecus*, possibly *S. mitratus*. The description certainly suits that animal rather than any *Macacus*. The habits mentioned by Osbeck are indeed those of a *Macacus*, not of a *Semnopithecus*; but they are evidently derived from hearsay, and not from observation.

There is a second reference under *S. aygula* in the original Linnæan description to "*Simia nigra magnitudinis mediæ*, Edw. Av. 221, t. 311." The figure and description of Edwards's "Middle-sized Black Monkey" were probably taken from a *Cercopithecus*.

I do not think the term *aygula* can with any reasonable probability be applied to the Malay Monkey.

The name *Simia atys* is of equally questionable origin. It was given to a young albino monkey that may have been either a *Cercopithecus* or a *Macacus*.

Unless some good reason can be found for retaining one of the earlier appellations, it appears probable that Cuvier's name has the best claim to stand for the species.

III. On *Macacus rhesus*.

The above name has been very generally adopted for the common *Macacus* of Northern India, and I believe correctly. Every now and then, however, this animal is called *M. erythræus* (Schreber). The name *Simia rhesus*, as is well known, was given by Audebert in the 'Histoire Naturelle des Singes et Makis,' published in 1797. A good figure of the animal was given, and the species was identified with the "Macaque à queue courte" of Buffon, Hist. Nat. Supp. vii. p. 56, pl. xiii.

Now this same figure of Buffon's was copied by Schreber, and the name *Simia erythræus* applied to it. But this plate does not appear amongst the Monkeys in Schreber's 'Säugethiere,' in vol. i. (1775), nor in the additional plates referred to as belonging to vol. i. in vol. iii. p. 590 (1778), and vol. iv. p. 636 (1792). The plate was published undoubtedly as plate viii. c in Wagner's Supplement (1840), and a description was given in the letterpress. The only question is whether any earlier publication took place. The reference to Schreber runs thus, "Schreb. tab. 8. fig. Buff." Schreber's original plate 8, however, represented *Simia mormon*, the Mandrill. There is, in Wagner's Supplement, no reference to any page as in the case of other species described in Schreber's original work.

But the name *Simia erythræa* was used long previously on Schreber's authority. The earliest use of it that I have been able to find is in Shaw's 'General Zoology' (vol. i. p. 33), published in 1880. The only reference is "Schreb. Supp.," no number of the plate nor of letterpress being quoted. Another reference is by Geoffroy (Ann. Mus. xix. p. 101), and many might be quoted. From none, however, can I gather that the plate on which the name

appeared was ever published; it was probably distributed to a few naturalists, but not issued in such a way as to give validity to the title.

IV. *On Presbytis or Semnopithecus thersites.*

A Hanuman Monkey from Ceylon was named *Presbytis thersites* in MS. by Walter Elliot, and was thus described by Blyth in 1847¹:—

“Adult male inferior in size to *P. entellus* . . . of a uniform dusky grey colour (devoid of fulvous tinge) on the upper parts, darker on the crown and fore limbs and passing to dull slaty-brown on the wrists and hands; the hair upon the toes whitish or dull white; no crest upon the vertex (as in *P. priamus*), nor does the hair there form a sort of transverse ridge (as in the living *P. entellus*); face surrounded with white, narrow over the brows; the whiskers and beard more developed than in the other Entelloid species, and very conspicuously white, contrasting much with the crown and body, which are darker than in *P. priamus*.”

Subsequently, in 1851², Blyth observed that *P. thersites* did not exhibit “the radiating centres of hair a little behind the brow seen in various other Entelloid Monkeys.” Kelaart (Prodr. Faun. Zeyl. p. 5) admitted *P. thersites* as distinct, and was followed by Sir E. Tennent and others. But in his ‘Catalogue of the Mammalia in the Museum Asiatic Society,’³ published in 1863, Blyth classed the original type of *P. thersites* under his *P. priamus*. This view was adopted by Dr. J. Anderson both in his ‘Anatomical and Zoological Researches,’ p. 19, and in his ‘Catalogue of Mammalia in the Indian Museum, Calcutta,’ p. 38. Dr. Anderson’s conclusions, like Blyth’s, were founded on the original types. I confess to being much puzzled. Dr. Anderson was doubtless under the impression that the longitudinal crest in *P. priamus* was artificial and due to the stuffer. But the common S. Indian and Ceylonese *Semnopithecus* is unquestionably crested. We have the testimony of several observers who have seen it alive, amongst them Jerdon and Kelaart, and recently Mr. W. Davison has been good enough carefully to observe living individuals and to communicate the result to me. I have also seen dried skins both from S. India and Ceylon, several of which had not been subjected to any manipulation, and in all the crest was as distinct as possible. Moreover, so far as I have been able to observe, the peculiar radiation of the hairs on the anterior part of the crown, so conspicuous in *S. entellus* and *S. schistaceus*, is always distinctly, if somewhat less, conspicuous in *S. priamus*. Blyth, however, especially described the type of his *Presbytis thersites* as wanting both crest and radiation.

Now there is nothing in the description of *P. thersites*, so far as I can see, to distinguish it from *Semnopithecus cephalopterus*, which has neither crest nor radiation, and which has “the whiskers and beard more developed than in the other Entelloid species, and very

¹ J. A. S. B. xvi. p. 1271.

² J. A. S. B. xx. p. 154.

³ P. 12.

conspicuously white." The crown and body too are darker than in *P. priamus*. I cannot help suggesting that the so-called *Presbytes thersites* was really a variety of *S. cephalopterus*, perhaps approaching the variety called *S. kelaarti* by Schlegel¹.

V. On *Semnopithecus pileatus* and *S. chrysogaster*.

Dr. J. Anderson, in his 'Anatomical and Zoological Researches' (p. 13), and again in his 'Catalogue of Mammalia in the Indian Museum,' has classed these terms as synonymous, I think from having misunderstood some remarks of Blyth's in the posthumous 'Catalogue of the Mammals and Birds of Burma,' p. 11². The two species are really very different, not only in coloration, but in structure, for *S. pileatus* has a peculiar cap of long harsh hair confined to the crown of the head, of which there is no trace in *S. chrysogaster*. The latter however appears, judging by the only known adult specimen, to have a compressed crest extending from the vertex to the nape.

Although an excellent figure of *S. chrysogaster* was published by Professor Peters (MB. Akad. Berlin, 1879, p. 830, pl. iv. *b*), no description except Blyth's (Cat. Mamm. Birds Burma, *l. c.*), taken from the drawing, has ever appeared, so far as I am aware. The animal might, however, easily be recognized from Blyth's account, which is good.

It is marvellous that so beautiful a species as *S. chrysogaster* should never have been detected again, if this animal is really from Tenasserim. It is true that the interior of Tenasserim, even to this day, is almost uninhabited, and very rarely visited by Europeans, the difficulties of travelling being excessive. But still it is remarkable that amongst the collections made since the days of Helfer by Major Berdmore, Captain Beavan, Mr. Davison, Mr. Limborg, Captain Bingham, and others, no specimen of so conspicuous a form should have been detected. Had not Peters (P. Z. S. 1866, p. 429, footnote) distinctly stated that the types were from Tenasserim, and had not Blyth (*l. c.*) confirmed the statement and added that they were collected by Helfer, I should be disposed to regard the locality as very doubtful. I examined the specimens when I was in Berlin two years since, and found them to be labelled "Tenasserim—Prof. Stempel," but I could learn nothing of their history.

VI. Notes on some of the Varieties of *Felis bengalensis*, Kerr, and especially on *Felis jerdoni*, Blyth.

The wild Spotted Cat of the Indian and Malay forests, appropriately named the "Leopard-cat" by Jerdon, has been very differently regarded by various naturalists. By some the differences in the size, form, and distribution of the spots, in the tint of the

¹ Mon. Singes, Mus. Pays-Bas, vii. p. 52.

² J. A. S. B. xliv. 1875, extra number.

ground-colour, in the size of the animal, and in the length of the tail, together with modifications in the form of the skull, have been regarded as specific, and a great number of specific names have consequently been proposed for the forms found in those parts of the Oriental region throughout which this type of Cats ranges. By others these differences have been treated as insufficient to justify specific distinction, and it has been urged that such differences as exist are not constant. As typical of the first class, Dr. Gray and Dr. Fitzinger may be quoted, of the latter Mr. Blyth.

Dr. Gray, in his latest work on the subject, the Catalogue of Carnivorous, Pachydermatous, and Edentate Mammalia in the British Museum (1869)¹, enumerates as distinct *F. minuta* (syn. *F. sumatrana*) from Sumatra, *F. javanensis* from Java, *F. nepalensis* from "India," "perhaps a hybrid or domesticated," *F. chinensis* from China, *F. pardinoides* from "India," *F. pardochroa* from Nepal, and a variety from Tenasserim, *F. tenasserimensis* from "India, Tenasserim," *F. jerdoni* from "Indian peninsula, Madras," *F. herschelii* from India, "Zanzibar?" (*sic*), and *F. wagati* from "India." Of these the form termed *F. pardinoides* has, I believe, since been ascertained to have been derived, not from India, but from South America. *Viverriceps ellioti* from "Madras," however, appears to belong to the same type as *F. bengalensis*, and to have no relation to either of the three very diverse forms, *F. viverrina*, *F. planiceps*, and *F. rubiginosa*, that are, on what principle it is difficult to conceive, associated together to form the genus *Viverriceps*. Two other names formerly given by Dr. Gray, *Leopardus horsfieldii*² from the Himalayas, and *L. reevesii*³ from China, are omitted from the Catalogue; both were probably given to forms of the "Leopard-cat."

Mr. Blyth, whose latest publication⁴ on the subject was considerably earlier in date than either Dr. Gray's or Dr. Fitzinger's, classed all the various Asiatic Spotted Cats to which the names above enumerated had been given by Horsfield, Temminck, Hodgson, Gray, and others, as forms of *F. bengalensis*, *Desmoulinus*. He, however, named a supposed distinct species, *F. jerdoni*, separating it on account of its smaller size, although it was very similar in its markings.

In the same writer's 'Catalogue of the Mammals and Birds of Burma,' published⁵ after his death in 1875, the name of *F. undata*, Desmarest, was adopted for the Leopard-cat.

¹ A considerable proportion of this work, as is well known, was reprinted from papers published in the Society's Proceedings for 1864, 1865, 1867 and 1868.

² Ann. & Mag. Nat. Hist. x. p. 260 (1842).

³ Cat. Mamm. B. M. 1843, p. 44.

⁴ P. Z. S. 1863, p. 184. The only apparent difference between the views there expressed and those published in the same author's Catalogue of the Mammalia in the Museum Asiatic Society, p. 60, published in the same year, 1863, but written a year or two previously, is that *F. jerdoni* is proposed as a distinct species in the first-mentioned paper only.

⁵ J. A. S. B. xlv. pt. 2, extra number, p. 27.

Jerdon¹ in this, as in other points, has followed Blyth closely, but he remarked (p. 107) of the supposed *F. jerdoni* that it might prove only a small variety of *F. bengalensis*. In treating of *F. rubiginosa*, however (p. 109), he suggested that the Ceylon species referred to that Cat by Kelaart might perhaps be *F. jerdoni* of Blyth, which, he went on to say, "that gentleman recently writes me is perhaps the representative of *F. rubiginosa* on the Malabar coast. In the British Museum there is a specimen stated to be from Malacca, but Mr. Blyth is inclined to think that a mistake."

Mr. D. G. Elliot, in his illustrated 'Monograph of the Felidæ' (1883), separated these Spotted Cats into two species, which he called *F. bengalensis* and *F. javanensis*; but he gave no reasons for so doing, and omitted to point out wherein these two supposed species differ from each other. He included several of the forms enumerated by Gray and Fitzinger under each of the two types.

Both in the monograph and in a paper published in the Society's Proceedings², Mr. Elliot classes *F. jerdoni* as a variety of *F. rubiginosa*, and says that both Blyth and Jerdon agreed in this identification after examining the specimens³. In this view, as will be seen presently, I am unable to concur.

The only other writer on the subject whom I shall quote is Dr. Mivart, who in his work on the Cat distinguishes as separate kinds *F. bengalensis*, *F. wagati*, *F. chinensis*, *F. minuta*, *F. jerdoni*, and *F. javanensis*.

F. rubiginosa is classed by all as distinct, and of its distinctness there can be no question. The anterior upper premolar p. 2 is always wanting, in adults at all events, as in the Lynxes, and the bony orbit in the skull is complete behind. In *F. bengalensis* and its varieties, out of more than 40 specimens examined I have only seen two in which the anterior upper premolar is absent on both sides, and the bony orbit is never complete behind. There is also a character in the external coloration by which every specimen I have examined of both forms can be at once distinguished. In all these Cats a variable number of interrupted dark lines pass from the forehead over the head and hind neck to the interscapular tract. Usually there are four well-marked bands on the head; of these the two inner are continued between the shoulders in *F. rubiginosa* by two long, straight, slightly diverging dark lines, without any lines or spots between them. In *F. bengalensis* and its allies there are never these two lines alone; either the markings are all broken and interrupted, or other lines and spots intervene between the continuations of the two inner frontal bands. The tail, too, in *F. rubiginosa* is unspotted above; in all forms of the Leopard-cat distinctly spotted.

There is in the Natural History Department of the British Museum at present a very fine series of these Indian and Malayan

¹ 'Mammals of India,' pp. 105-107 (1867).

² P. Z. S. 1871, p. 760.

³ This is confirmed by Mr. Holdsworth, so far as regards Mr. Blyth, P. Z. S. 1871, p. 758.

Spotted Cats; no less than 6 specimens of *F. rubiginosa*, all but one of which are from Ceylon, and the remaining specimen from Nellore in Southern India; and 42 skins of *F. bengalensis* and its allies. In going through the latter, whilst I have been struck by the great variety exhibited, I have been unable to trace a single character, external or cranial, by which the various races can be distinguished. There are doubtless several races, and except that I cannot see how *F. jerdoni* is to be separated, even as a variety, from *F. javanensis* of Horsfield, those accepted as kinds by Prof. Mivart are fairly recognizable. There is perhaps one to be added, the true *wagati* of Sir W. Elliot, not the form that was (I believe erroneously) described under that name by Dr. Gray. The variation in dimensions is not nearly so great as in the Leopard, and that in the markings is less than in the Ocelot.

Accepting, then, the view that all the forms of Leopard-cat are varieties of one species, which, for reasons to be assigned presently, must be called *F. bengalensis*, the next question for determination is whether the Cat called *F. jerdoni* by Blyth is a distinct form, as it has been considered by Blyth and Mivart, whether, as Jerdon suggested, it is a small race of *F. bengalensis*, or whether, as stated by Mr. D. G. Elliot, it is identical with a form of *F. rubiginosa*. *F. jerdoni* was founded by Blyth upon three specimens, as he writes (P. Z. S. 1863, p. 185):—"I first detected an adult male and a kitten of this species in the Museum at Madras, and find that there is an adult specimen also in the British Museum." There is now a second specimen in the British Museum, obtained from the East India Museum and labelled *F. jerdoni* in Mr. Blyth's handwriting. On the stand of the original specimen the name *F. jerdoni* has also been written by Mr. Blyth. The two specimens are precisely similar and that first in the Museum may be taken as the type of the species.

The markings of this specimen, as already mentioned, are scarcely distinguishable from those of Horsfield's type of *F. javanensis*. In both the characteristic points mentioned—the marks in the interscapular region, and the spots on the tail—the two skins agree with *F. bengalensis* and not with *F. rubiginosa*. To complete the evidence, Mr. Thomas has had the skull of one of the skins of *F. jerdoni* extracted, and it proves to possess the anterior upper premolar and imperfect orbit of *F. bengalensis*. I have, therefore, not the least hesitation in assigning *F. jerdoni* as a variety to that species, and I believe it to be identical with the form commonly known as *F. javanensis*. The locality of neither specimen of *F. jerdoni* in the National Collection is known; but, considering that so closely similar a form has been described from Java, whilst there is no evidence as to the derivation of the Madras Museum specimens, it is far from improbable that Mr. Blyth was mistaken in his supposition, and that these skins were really brought originally from Malacca or the neighbourhood.

The next point for consideration is the oldest scientific name of the Leopard-cat. Blyth, as already remarked, used in 1863¹ the

¹ Cat. Mam. A. S. p. 60; in P. Z. S. 1863, p. 184, he calls this cat *F. bengalensis*, Desmoulins, probably a slip for Desmarest.

term "*Felis bengalensis*, Desmarest," and in his 'Catalogue of the Mammals and Birds of Burma,' *F. undata*, Desmarest.

The *Felis undata* of Desmarest was described first and very briefly in the *Nouv. Dict. d'Hist. Nat.* (1816), vi. p. 115, no. 27, as *Le petit chat sauvage de l'Inde*. It was said to be smaller than *F. javanensis*, its fur to exhibit waves rather than spots ("son pelage présente des ondes plutôt que des taches"), and it was compared to the Wild Indian Cat of Vosmaer, except that the latter was figured of a more bluish tinge.

In Desmarest's 'Mammalogie,' published in 1820, further details were given, the essential character being, "Pelage d'un gris sale, avec des nombreuses petites taches noirâtres, un peu alongées." This might perhaps refer to *F. viverrina*, but the description is palpably at secondhand, being founded on a specimen of a kitten brought by Péron from Java, and noticed by Cuvier in the 'Ossemens Fossiles.' It is clear that this animal was not *F. bengalensis*. The Wild Cat of Vosmaer is called by him "Japansche Bosch-Kat," and the figure has not the least resemblance to any Indian wild cat. Indeed the coloration is unlike that of any wild animal, and the specimen was doubtless a domestic cat or the offspring of one run wild.

But even if the term *F. undata* were applicable, it must give way to the much older *F. bengalensis* if, as appears to me to be the case, the latter can be shown to be really applicable to the same species; for this name dates, not from Desmarest's article published in 1816, as Blyth appears to have supposed, but from Kerr's 'Animal Kingdom' (p. 151), published in 1792. The name was founded on the Bengal Cat of Pennant (*Hist. Quadr.* p. 272), described from an animal brought alive to England, and which was said to have swum on board a ship at anchor off the coast of Bengal. This circumstance led Jerdon (*Mamm. Ind.* p. 106) to suggest that Pennant's Cat was a specimen of *F. viverrina*; but Pennant's description shows that the species was really the Leopard-cat, and it is more likely that the story of its capture was incorrect. The animal was described as of a beautiful pale yellowish-brown colour above, white below, and as rather less than a common cat in size, none of which characters agree with those of *F. viverrina*, whilst all apply to the Leopard-cat.

VII. *On the Scientific Name of the Common Indian Mongoose* (*Herpestes griseus*, *auct.*, *nec Ichneumon griseus*, *Geoff.*).

Although there has been by no means a general agreement as to the name to be applied to the common Mongoose of the Indian Peninsula, the Grey Ichneumon of some, a considerable majority of English naturalists have identified the animal with the *Ichneumon griseus* of Geoffroy St.-Hilaire, or, which comes to the same, with the *Herpestes griseus* of Desmarest. This specific name *griseus* had been adopted by zoologists in British India until recently, when Dr. Anderson (*An. Zool. Res.* p. 181) rejected it in favour of Wagner's later name *pallidus*, because Geoffroy's *Ichneumon griseus* "originally included an African species." I agree with Dr.

Anderson in rejecting the name *griseus*, not, however, merely because it included an African species, which might not under all circumstances have been a sufficient reason, but because it was, I think, proposed for an African species, and not for the Indian Mongoose at all.

In a note to his paper on the Mammals of Mr. Hume's collection (P. Z. S. 1886, p. 56, note), Mr. Oldfield Thomas gives reasons for coming to conclusions opposed to my own. He identifies the Indian Mongoose with *Ichneumon griseus* of Geoffroy, and rejects Gmelin's specific name, which, as I will show presently, appears to me applicable. To explain these views some details are necessary.

The original description of *Ichneumon griseus* by Geoffroy St.-Hilaire occurs in the Natural History of the 'Description Générale de l'Égypte,' vol. ii. pp. 138, 139, and runs thus¹:—

“ Une autre espèce, également des Indes Orientales, est la mangouste nems de Buffon, Supp. iii. pl. 27. Elle est d'un cinquième plus grande que l'espèce à bandes², sa queue se termine de même en pointe, son pelage est plus claire, d'une couleur uniforme, tant sur le dos que sur les pattes, ses petits traits d'un brun roussâtre disséminés également, et dont il y a autant que de poils, font voir en gris-roux la teinte totale qui est, au fond, jaune couleur de paille. Daubenton a connu cette mangouste et l'a décrite dans la première partie de son article H. N. G. tome xiii.”

This description will apply equally well to several distinct kinds of *Herpestes*. It will be seen that the species is founded on the *Mangouste nems* of Buffon. Now this is distinctly said by Buffon to be from Africa. As the term East Indies (Indes Orientales) was until recently very vaguely used and included all countries east of the Cape of Good Hope, East Africa may have been the locality meant by Geoffroy. There is nothing, so far as I can see, in the description to distinguish either the *nems* or Geoffroy's *Ichneumon griseus* from a young *Herpestes galera* or possibly *H. pulverulentus*. Mr. O. Thomas, in his paper on the African Mongooses (P. Z. S. 1882, p. 72), refers *Viverra nems*, Kerr (An. Kingdom, p. 160), to *H. galera*. Now Kerr's name was clearly founded upon Buffon's description, the characters assigned being abridged from Buffon's account; and if *Viverra nems*, Kerr, be the same as *Herpestes galera*, so is *Ichneumon griseus*, Geoffroy. Moreover, as the two names were founded on the same description, the oldest name has under any circumstances priority over *griseus*, which must therefore be relegated to the list of synonyms, whatever be the species to which it ought to belong.

But there is another and more important fact to be considered. The paper by Geoffroy on the Egyptian *Ichneumon*, from which the description of *I. griseus* has just been quoted, contains a list with notes of the species known to the author. The first of these is the “*mangouste de l'Inde ou la mangouste à bandes*,” of which it is remarked, “ Elle porte aux Indes le nom de *Mungo* ou de *Mungutia*,

¹ I give the extract in full, as the work is rare.

² The head and body of which are said to be 25 centimetres long.

d'où Buffon a dérivé celui de mangouste, que nous conservons comme nom générique." This is said, moreover, to be the animal noticed by Kaempfer and others, and recorded by Linnæus. In the note on p. 139, where Latin names are given, this species is called *Ichneumon mungo*. I believe that Geoffroy understood by this name, and not by *I. griseus*, the Common Indian Mongoose; and I shall show that this was the view of Frederic Cuvier, Geoffroy's collaborator in the 'Histoire Naturelle des Mammifères.' The mixing up of the "*Mangouste de l'Inde*" and the "*Mangouste à bandes*" is due to Buffon and Schreber.

Some years ago I expressed the opinion¹ that the oldest name for the Common Indian Mongoose was *Viverra mungo* of Gmelin. This name, which was evidently the origin of Geoffroy's *Ichneumon mungo*, has been by recent writers either ignored or applied to an African species, *Crossarchus fasciatus*. That several species were referred to in the descriptions quoted by Gmelin is unquestionable; and there is good reason for believing that one of these was *C. fasciatus*; but I am inclined to look upon the name as really given to the Indian Mongoose, for it is applied to the *Viverra ichneumon* β of Linnæus and Schreber. Now the *V. ichneumon* β of Linnæus's twelfth edition, the *Mustela glauca* of the fifth, and the *Mungos* of his 'Amœnitates Academicæ,' are all founded on the *Viverra mungo* of Kaempfer, said to be called "Mungutia" by the Indians and Mungo by the Portuguese. Kaempfer visited India amongst other places, and gave in his work² a general account of the Indian Mongoose. It is probable that his remarks refer partly also to *H. javanicus*. The question, however, is to determine which is the species of *Herpestes* known in the country it inhabits by the name *Mungutia*, or by some term of which *Mungo* or *Mungos* is a corruption, for this must clearly be the species to which the names of Kaempfer, Linnæus, and Gmelin were intended to apply. And as the Anglo-Indian term Mongoose is evidently of similar origin, its derivation if ascertained must elucidate the question.

In Colonel Yule's recently published 'Hobson Jobson' the term Mongoose is traced to a Telugu word *mangisu*. Sykes³, Elliot⁴, and Jerdon⁵ state that the word *mangús* itself is Mahratti, and, according to Jerdon, Hindi also in Southern India. I do not attach much importance to this, as it is just possible the name may not have existed originally in either language, being probably Dravidian, whilst both languages are of Sanscrit derivation. The Hindi name in Northern India is *Nyul*, but I know that *mangús* is pretty generally understood by those natives who come much in contact with Europeans. But to return to the dialects of Southern India. Elliot⁶ gives *Mungli* as Canarese; and Kelaart⁷ *Moogatea* as Cingalese. In all probability, as so frequently happens in Indian languages, a nasal *n* before the *g* in Cingalese has escaped Kelaart's

¹ Eastern Persia, ii. p. 42.

³ P. Z. S. 1831, p. 102.

⁵ Mammals of India, p. 132.

⁷ Prodromus Faun. Zeyl. p. 41.

² Amœn. Exot. p. 574.

⁴ Madr. Journ. Lit. Sci. x. p. 102.

⁶ *Loc. cit.*

notice, for it is scarcely likely that the first syllable in Cingalese wants the *n* that occurs in Telugu, Canarese, &c. In this case the Cingalese name furnishes the original Mungutia of Kaempfer.

I cannot find any similar word in Malay. Horsfield¹ gives *Garangan* for *H. javanicus*, and Cantor² *Musang turon* for *H. brachyurus*. *Musang* is the term used for *Paradoxurus*, whence the specific name *musanga* was derived.

I conclude that the name *mungo* or *mungos* was derived from the Common Mongoose of India, *H. griseus* of many modern writers, and that this was the animal indicated by Gmelin and others as *Viverra mungo*, by Geoffroy as *Ichneumon mungo*, and, as I shall show, by F. Cuvier as *Herpestes mungos*.

If, however, the specific name *mungo* be rejected, what is the next in priority? This, I think, must be *Herpestes frederici*, Desmarest³, which, like *H. malaccensis*, Fischer⁴, was applied to the animal figured and described by F. Cuvier as *La Mangouste* in the well-known 'Histoire Naturelle des Mammifères.' Desmarest's name was given in honour of Frederic Cuvier. The specimen figured was believed (probably erroneously⁵) to have come originally from Malacca, and was referred to in an article on another species as the "Mangouste de Malacca." It is true that Blyth, Jerdon, and some other writers have classed this under Fischer's name as distinct from their *H. griseus*, the Common Indian Mongoose, the latter being less rufous than the former; but I quite agree with Dr. Anderson in classing the rufous and grey forms together⁶. Now comes the important point already referred to. F. Cuvier in his article distinguished the animal which, following Buffon, he called "*La Mangouste*" from the *Ichneumon griseus* of Geoffroy, the *nems* of Buffon, and in the "Table générale et méthodique" to the whole work he assigned to *La Mangouste* the Latin name of *Herpestes mungos*.

It appears to me that from Gmelin to Frederic Cuvier or even later⁷ the specific name *mungo* or *mungos* was understood to apply to the Common Indian Mongoose, and that this specific name should be restored instead of the term *griseus*, which was never intended for the animal and was not, so far as I can ascertain, applied to it before 1830, one of the first authors who used the name being Sykes in 1831. I quite admit the justice of Mr. Thomas's argument that Gmelin's name was applied to the *Viverra*

¹ Res. Java.

² J. A. S. B. xv. p. 243.

³ Dict. Sc. Nat. xxix. p. 60 (1823).

⁴ Synopsis Mamm. p. 164 (1829).

⁵ In this case, and also in that of the specimen obtained by Cantor in the Malay Peninsula (J. A. S. B. xv. p. 242), it is, I think, most likely that the animals had originally been taken from India.

⁶ I also unite the Sind form described by myself as *H. ferrugineus* (P. Z. S. 1874, p. 661, pl. lxxxi.) and Mr. Murray's *H. atkinsoni* (Vert. Zool. Sind, p. 34). In the same manner I regard *H. smithi* and *H. jerdoni* (*H. monticolus*, Jerdon) as rufous and grey varieties of the same specific form.

⁷ In the late Sir W. Elliot's excellent list of Southern Mahratta mammals published in 1839 (Madr. Journ. Lit. Sci. x. p. 102).

ichneumon β of Schreber, at least that was the first reference, that Schreber's figures were taken from Buffon, and that one of them may have been the species known as *H. fasciatus*, whilst the other, though probably meant for the Indian Mongoose, is not good enough for recognition. No doubt, too, under Schreber's name and references several distinct species were confounded, one of these, as I have shown elsewhere, being the small *H. auropunctatus* v. *persicus*. But Schreber's *Viverra ichneumon* β was founded on that of Linnæus, and I have shown that the latter rests much on Kaempfer, though other references are given, all relating more or less clearly to forms of Mongoose.

The conclusions to which I have come may therefore be briefly stated thus. The *Viverra mungo* of Gmelin comprised several species, of which the most important were *Crossarchus fasciatus* and the Indian Mongoose. Probably *Herpestes javanicus* was also included. Now in Geoffroy's paper *C. fasciatus* and *H. javanicus* were distinguished, leaving the Indian Mongoose in *H. mungo*, which is, I think, the proper name for the animal. If, however, the specific term be rejected as being barbarous, or as having been applied originally to a confused admixture of different species, the name next in priority is *H. frederici*.

VIII. On the Scientific Name of the Common Fox, and on the Classification of Allied Forms.

The common European Fox is usually designated either *Canis vulpes* or *Vulpes vulgaris*. The first name is the true Linnæan title, but if, in accordance with the views expressed by Prof. Huxley¹, the Foxes are separated generically from the Dogs, the question arises as to whether the specific name *vulgaris* is rightly applicable. This term is derived from Brisson, whose specific names are not admissible, though by the British Association rules his generic terms for birds are, when they are additions to those employed by Linnæus. The generic name *Vulpes*, which was employed by Brisson, is therefore available, if the same rule be applied to mammals as to birds, but the specific term *vulgaris* has no authority.

All later writers, however, refer two Linnæan species, *Canis vulpes* and *Canis alopex*, to the Common Fox. The two are distinguished, according to Linnæus, by the former having the tip of the tail white, the latter black. *C. alopex* is said to inhabit Europe and Asia, and appears to be merely an accidental or even an individual variety, the Fox with the characteristically black-tipped tail, *C. corsac*, having been known to Linnæus and named by him. The term *alopex* is derived from Aristotle's name for the Fox. It appears therefore that the correct name for the Common Fox, if the genus *Vulpes* be admitted, is *Vulpes alopex* (L.).

There is a curious gradation in size amongst the Foxes allied to *V. alopex*, the European form exceeding all the others in stature. *V. flavescens* from Central Asia comes next, and then the Himalayan

¹ P. Z. S. 1880, p. 286.

race commonly called *V. montana*¹. The North-African *V. nilotica* and the Persian *V. persica* are considerably smaller; and *V. griffithi* of Afghanistan, *V. pusilla* of the Punjab, and *V. leucopus* of Western India are of still inferior dimensions, the last-named being the smallest of the series. But except in size I can find no constant distinction between these races. I do not think in any case that *V. griffithi* and *V. pusilla* can be distinguished from *V. leucopus*, and I have equally little hesitation in uniting *V. flavescens* and the so-called *V. montana* with *V. alopex*; but I do not feel so sure about *V. persica* and *V. nilotica*. So far as India is concerned, it appears most convenient to recognize as distinct species the large *V. alopex* (including *V. flavescens* and *V. montana* v. *himalayica*) and the small *V. leucopus* (comprising *V. pusilla* and *V. griffithi*), especially as the two are said to occur together in Afghanistan; and it is possible that *V. nilotica*, originally described as being the size of the European Red Fox (*V. alopex*), may be a variety of that species, and *V. persica* of *V. leucopus*. The North-American Cross Fox, *Canis fulvus* v. *pennsylvanicus*, appears also to be a variety of *V. alopex*.

IX. On the Generic Terms *MUSTELA*, *MARTES*, and *PUTORIUS*.

By most English naturalists the Martens have been referred to a genus *Martes*, and the Polecats and Weasels to *Mustela*, under the supposition that the old Linnæan genus *Mustela* was thus divided by Cuvier in 1797 in his 'Tableau Élémentaire.' This was not the case; he merely called the Martens in French "*Les Martes*." But he did divide the genus in the 'Règne Animal,' 1st ed., published in 1817, and proposed four subgenera, keeping the Martens alone in *Mustela*, and using *Putorius* for the Weasels and Polecats². Alston urges, P. Z. S. 1879, p. 468, that the names then proposed by Cuvier cannot be employed as they are only of subgeneric value; but not only have they been generally used by continental naturalists, but several of the best known genera of birds, amongst others *Ploceus*, *Vidua*, and *Budytes*, stand on precisely the same foundation, having been similarly proposed in the same work. There is nothing to show that the Weasels were considered the typical forms of *Mustela* by Linnæus; indeed his description of the genus points rather to the Martens, and the word *Mustela* in Latin appears to have been employed for a Marten.

X. On *XANTHARPYIA*, *ELEUTHERURA*, and *CYNONYCTERIS*.

My friend Mr. Dobson, in his valuable works on Chiroptera, has adopted Peters's term *Cynonycteris*, first proposed in 1852, for the genus of Fruit-eating Bats comprising *Pteropus amplexicaudatus*,

¹ *Canis vulpes montana*, Pearson, J. A. S. B. v. p. 313. According to the views of many of the best naturalists, a trinomial appellation like this has no claim to priority, and Ogilby's *Canis himalayicus*, P. Z. S. 1836, p. 103, given the same year, would be preferred.

² My attention was called to this by Mr. Oldfield Thomas.

P. ægyptiacus, and *P. stramineus* of Geoffroy St.-Hilaire, *P. collaris*, Illiger, and some other species. In the British Museum Catalogue of the Chiroptera, p. 70, Mr. Dobson gives his reason for rejecting the earlier title *Eleutherura* of Gray, proposed in 1844 for *Pteropus hottentota* = *collaris*.

I think another term of Gray's, *Xantharpyia*, has priority over *Eleutherura*. Both appear together, it is true, in the Mammalia of the Voyage of the 'Sulphur,' p. 29, where *Eleutherura* was first proposed; but *Xantharpyia* had been published in the previous year, 1843, in the 'List of the Specimens of Mammalia in the Collection of the British Museum,' pp. 37, 38, and applied to the three species *Pteropus amplexicaudatus*, *P. ægyptiacus*, and *P. stramineus*. It is true that no description of the genus was given, but this is not essential.

XI. On HIPPOSIDERUS and PHYLLORHINA.

It is, I fear, impossible to admit that the name *Phyllorhina* can be used for the group of Leaf-nosed Bats to which the term has been applied by Bonaparte, Peters, Dobson, and others. The reference given by both Peters and Dobson for the original description of the genus is to Bonaparte's 'Saggio di una Distribuzione metodica degli Animali vertebrati,' Rome, 1831, p. 16. In this work, which contains no descriptions, and is a mere list of generic names, the genus *Rhinolophus* is divided into two subgenera thus,—

Rhinolophus, Leach.

Phyllorhina, Leach.

For a long time I was unable to discover where these genera of Leach were published; but Mr. Waterhouse, the Society's librarian, has succeeded in finding the names in that author's 'Systematic Catalogue of the Specimens of the Indigenous Mammalia and Birds in the British Museum,' a small pamphlet issued in 1816 and reprinted by the Willughby Society. In this, immediately following *Rhinolophus ferrum-equinum*, is "*Phyllorhina minuta*, small Leaf-nose; Torquay, Devon." It is manifest that the genus *Phyllorhina* was proposed by Leach for *Rhinolophus hipposiderus*, and consequently cannot be applied to the genus for which it has been used by Peters, Dobson, and others.

Bonaparte, it is true, in his 'Iconografia della Fauna Italica,' a work published at intervals between 1832 and 1841, proposed to transfer Leach's generic name from the smaller Horseshoe Bat to the first section of the genus *Rhinolophus* in Temminck's 'Monographie de Mammalogie,'¹ vol. ii. pp. 10 *et seq.*, and this section corresponds to the genus *Phyllorhina* of later writers. Bonaparte's remarks occur in the article describing *Rhinolophus ferrum-equinum*. But to admit a change of this kind would lead to endless confusion.

¹ As the date of this volume ranges from 1835 to 1841, Bonaparte's application of the generic term *Phyllorhina* to the section defined by Temminck can scarcely have been published before 1836.

Moreover, independently of the question whether such a change could be admitted, Gray's generic name *Hipposideros* has priority over Bonaparte's *Phyllorhina* as distinguished from Leach's. Peters and Dobson quote *Hipposiderus* as dating from 1834. In the 'Proceedings' of this Society for that year, p. 53, the name was mentioned without description and without any species being quoted as type, and would consequently have no validity; but the generic term *Hipposiderus* was, in fact, first proposed three years earlier, in 1831, in Gray's 'Zoological Miscellany,' p. 37, with a description which, although clumsily worded, pointed out the characteristic distinctions of the nose-leaf, and with the following list of the species referred to the new genus:—*H. speoris*, *H. elongatus*, *H. diadema*, *H. larvatus*, *H. vulgaris* (= *larvatus*), *H. deformis* (= *larvatus*), and *H. tridens*. With the exception of *H. elongatus*, which I cannot trace, all these are species of the genus *Phyllorhina* of Peters and other writers. It is quite contrary to the rules of nomenclature generally adopted to set aside a generic name *a*, properly defined in 1831, in favour of another name *b*, that in 1816 had been proposed for a species belonging to a different genus and that was only applied some years later to the same genus as *a* had already been proposed for.

I can see no escape from the conclusion that the name *Hipposiderus* must be adopted for the genus—a conclusion which I greatly regret, as *Phyllorhina* is preferable on the score both of euphony and of signification.

December 20, 1887.

Prof. W. H. Flower, C.B., LL.D., F.R.S., President, in the Chair.

The Secretary read the following report on the additions to the Society's Menagerie during the month of November 1887:—

The total number of registered additions to the Society's Menagerie during the month of November was 132, of which 100 were by presentation, 7 by birth, 8 were received in exchange, and 17 on deposit. The total number of departures during the same period, by death and removals, was 110.

Mr. Sclater read the following description of a supposed new Humming-bird of the genus *Chætocercus*, contained in a letter received from Dr. H. Burmeister, F.M.Z.S.:—

"The species is nearly allied in size, figure, and colour to *Chætocercus bombus* (Gould, Mon. Troch. Suppl. pl. 32), but differs entirely in its tail, which is of singular construction.

"The bill is straight, entirely black, and as long as the head (1 cm.). The whole upper part of the body is of a dark green metallic colour,

except the wings, which are black, 1 inch ($2\frac{1}{3}$ cm.) long, and somewhat curved. The small feathers of the throat on the under jaw are whitish, with a darker spot in the middle; there begins on the throat the crimson-red bilateral beard, which is composed on both sides of three rows of very small feathers, these becoming somewhat larger in the middle of the beard and terminating with two ranges of feathers in the exterior half. Many of these feathers are shining metallic green in certain positions. A white spot behind the eyes descends from there to the breast, which is also whitish, but with a dark spot on every feather, causing a greyish appearance in the middle of the breast. The hinder half of the breast and the belly are black, but the anal portion is white, and also the sides of the body except the thighs, which are black. The inferior feathers behind the anal region are clear yellow-brown, but those in the middle have a green metallic spot. The tail is composed of eight feathers; the two exterior on each side are more than an inch long, very small but of equal size in the whole extent, and rounded at the tip, not pointed. The exterior rectrix is entirely black; the second has a clear brown stripe on the inner border. The third rectrix of each side is very short, only half an inch long, and more than eight lines shorter than the exterior; its colour is entirely black. The two middle tail-feathers are shorter than the third pair, and partly covered by the coverts; they are of a metallic green colour like the coverts.

“*Hab.* A single specimen obtained in the mountains of Tucuman (Valle de Tafi) is in the National Museum of Buenos Aires.”

Mr. Sclater exhibited a drawing of this bird sent by Dr. Burmeister, and stated that, after consulting Mr. Salvin and Graf v. Berlepsch, he had come to the conclusion that it must belong to a new species, for which he proposed the name *Chatocercus burmeisteri*.

The Secretary exhibited, on behalf of Major Yerbury, F.Z.S., a pair of horns of the Oorial (*Ovis cycloceros*) which formerly belonged to the Royal Artillery Mess at Fort Attock, and were stated to have been originally obtained in the Chitta Pahar Range a few miles south of Attock.

These horns were of unusual size, and, although they came from the mountains on the left bank of the Indus, appeared to belong to the form described by Mr. A. O. Hume as *Ovis blanfordi* (J. A. S. B. vol. xlv. part 2, p. 327, 1877).

The Secretary read an extract from a letter received from H. M. Phipson, Esq., C.M.Z.S., of the Bombay Natural History Society, relating to living specimens of two Snakes lately received at Madras.

1. A *Trimeresurus erythurus*, which had been caught on board a timber-ship from Moulinein in Bombay Harbour.

2. An *Ophiophagus bungarus*, from the Canarese Jungles, which

was stated to be 12 feet in length, of a jet-black, with a cream-coloured throat and bars across its back.

The Secretary remarked that the latter specimen would be particularly acceptable to this Society, as their large specimen of *Ophiophagus bungarus* received on the 5th March, 1875, had died on the 25th of October last, after living twelve years and seven months in the Society's Gardens, during which period it had been fed nearly entirely upon English snakes.

A paper was read by Mr. Frank E. Beddard, F.Z.S., Prosector to the Society, entitled "Observations on the Structure of Hooker's Sea-Lion (*Arctocephalus hookeri*)."

This paper will be published entire in the Society's 'Transactions.'

The following papers were read:—

1. Description of a new Genus of Lizards of the Family
Teiidae. By G. A. BOULENGER, F.Z.S.

[Received November 24, 1887.]

STENOLEPIS.

Tongue moderately elongate, arrow-headed. Head with large shields; frontonasal separating the nasals; no præfrontals; frontoparietals present; nostril pierced in the lower part of the nasal, touching the first labial. Lower eyelid with an undivided, semi-transparent disk. Ear exposed. Limbs well developed, pentadactyle. Dorsal and lateral scales equal, hexagonal-lanceolate, keeled, imbricate, arranged in regular transverse series; ventral plates large, subquadrangular, rounded and overlapping posteriorly, smooth, arranged in regular longitudinal and transverse series. No collar-fold. Tail cylindrical. A præanal pore on each side in the female.

Nearly equally related to *Arthrosaura*, Blgr., and *Heterodactylus*, Spix. Agreeing with the former in the presence of frontoparietal shields, the distinct ear, and the well-developed pentadactyle limbs; with the latter in the absence of præfrontal shields, the position of the nostril, the undivided palpebral disk, and the absence of a collar-fold; with both in the scaling of the body.

STENOLEPIS RIDLEYI.

Habit lacertiform. Snout short, obtuse. Two large supraoculars, with a small one in front; frontal pentagonal, a little longer than broad; frontoparietals small; a pair of large parietals, separated by an equally long, but narrow interparietal; a square occipital; a loreal and a freno-orbital; a row of very small suborbitals; a large sub-circular temporal, with two smaller ones above it; six upper and five lower labials; five chin-shields, an anterior azygous and two pairs forming a suture, very large; large transverse, rounded gulars, in two